

What is claimed is:

Claims

1. A method comprising the steps of:

obtaining a measured fluid pressure near a filter in an internal combustion engine;

determining a predetermined value based on at least one engine operating parameter; and

comparing the measured fluid pressure to the predetermined value, yielding a compared pressure;

when the compared pressure exceeds an established value, indicating that a potential fluid problem is present.

2. The method of claim 1, wherein the at least one engine operating parameter includes engine speed.
3. The method of claim 1, wherein the at least one engine operating parameter includes engine load.
4. The method of claim 1, wherein the at least one engine operating parameter includes fluid temperature.
5. The method of claim 1, wherein the measured fluid pressure occurs near an outlet of the filter.
6. The method of claim 1, wherein the measured fluid pressure occurs near an inlet of the filter.

7. A method comprising the steps of:

obtaining a measured fluid pressure near a filter in an internal combustion engine;

determining a predetermined value that is a function of at least one engine operating parameter;

determining a difference between the predetermined value and the measured fluid pressure; and

determining whether to indicate a warning condition based on the difference.

8. The method of claim 7, wherein the measured fluid pressure is occurs near an outlet of the filter.
9. The method of claim 7, wherein the measured fluid pressure occurs near an inlet of the filter.
10. The method of claim 7, wherein the at least one engine operating parameter includes at least one of engine speed, engine load, and fluid temperature.
11. The method of claim 7, further comprising the steps of comparing the difference to at least one predetermined value, and activating at least one timer based on the difference.
12. The method of claim 7, further comprising the step of indicating the warning condition.
13. The method of claim 7, further comprising the step of transmitting the warning condition to a remote location.

14. An apparatus comprising:

a pressure sensor arranged and constructed to measure a pressure of a fluid near a filter for the fluid of an internal combustion engine, yielding a measured fluid pressure; and

an engine control module arranged and constructed to determine a predetermined value based on at least one engine operating parameter and to compare the predetermined value to the measured fluid pressure.

15. The apparatus of claim 14, wherein the pressure sensor is located in the fluid near a discharge of the filter.

16. The apparatus of claim 14, wherein the pressure sensor is located in the fluid near an inlet of the filter.

17. The apparatus of claim 14, wherein the at least one engine operating parameter includes at least one of engine speed, engine load, and fluid temperature.